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(54) **MICROSCOPE AND A METHOD FOR EXAMINING A SAMPLE USING A MICROSCOPE**

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See application file for complete search history.

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(57) **ABSTRACT**

A microscope, in particular a confocal microscope, has one or more lasers for generating an illumination light for a sample and has a detection device for detected signals from the sample. The detection device includes multiple adjustable spectral detection channels for the detection of predefinable different wavelength regions, and is configured and refined in the interest of particularly versatile utilization in consideration of a wide variety of phenomena, with particularly good separation of the phenomena in the context of investigation, in such a way that multiple temporal detection windows are respectively settable for the spectral detection channels.

**19 Claims, 12 Drawing Sheets**

